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10/543,195

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Dieter Tcpcke

U198US(PCT)

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EXAMINER

YOO, REGINA M

ART UNIT

PAPER NUMBER

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MAIL DATE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/543,195	Applicant(s) TEPPKE, DIETER	
	Examiner Regina Yoo	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 November 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 22-43 is/are pending in the application.
- 4a) Of the above claim(s) 22-33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 34-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **FINAL ACTION**

### ***Response to Amendment***

The amendment filed on 11/05/2007 has been received and claims 22-43 are pending.

### ***Election/Restrictions***

1. Applicant's election with traverse of Group II in the reply filed on 11/05/2007 is acknowledged. The traversal is on the ground(s) that the reference of Tabone does not disclose the special technical feature of means for generating a temperature difference between the microtome and the cryostat chamber. This is not found persuasive because this feature is disclosed by Tabone in the form of a heater (16) as indicated in previous office action (see further explanation in Response to Arguments below).

The requirement is still deemed proper and is therefore made FINAL.

It is noted that the claims 22-33 are non-compliant with 37 CFR 1.121 with respect to claim status identifier, where currently submitted claims 22-33 require the status identifier of "withdrawn – currently amended" rather than "currently amended".

2. This application contains claims 22-33 drawn to an invention nonelected with traverse in the reply filed on 11/05/2007. A complete reply to the final rejection must

include cancellation of nonelected claims or other appropriate action (37 CFR 1.144)

See MPEP § 821.01.

***Claim Rejections - 35 USC § 102***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 34-38, 41 and 43 are rejected under 35 U.S.C. 102(b) as being anticipated by Tabone (FR 2705587).

As to Claim 34, Tabone ('587) discloses a device for disinfecting a cryostat (1, 2) having a microtome (9) (see Figures 1 and 2), the device comprising:

means (4, 6 and V) for subjecting a closed cryostat chamber (1) to a defrosting phase (see last 7 lines of page 2 through 1<sup>st</sup> line of page 3, as well as lines 26-29 of page 3 of English translation of the Description);

means (12, in association with 13-15) for introducing a vaporous disinfectant (see page 1, lines 23-28 of the English translation, particularly "a fog...of a suitable inhibiting agent" which is deemed to indicate a vaporous state of the disinfectant) into said closed cryostat chamber (1);

means (7, 8) for waiting an effective time for action of the disinfectant (see entire document, particularly page 3, lines 19-22, 35-36 and 42-44 of the English translation);

means (16) is capable of generating, subsequent to elapse of said effective time, a temperature difference between said microtome (9) and said cryostat chamber (1);  
and

means (18) for discharging disinfectant deposited in a colder region of said cryostat chamber (1) (where the lowest part of the chamber 1 shaped as funnel leading to the drain 18 is capable of being a colder region when the heater 16 placed under the microtome is operated to heat the microtome to a higher temperature than the temperature of the interior of the cryostat, under control of the evaporator 4).

As to Claim 35, Tabone ('587) discloses that the device (see rejection of claim 34 above and Figures 1-2) further comprises a microtome (9) in said cryostat chamber (1), a refrigerator (4), and a control (8) communicating with said disinfectant introduction means (12-14) and with said effective time waiting means (a part of control 8), wherein said control (8) generating said temperature difference in said cryostat chamber (1) through heating and/or cooling, wherein a collecting device (5 and the funnel region at the lowest portion of chamber 1 connected with 18) is disposed in a colder region to remove deposited disinfectant (where the location of the collecting device 5, as well as the funnel region leading to 18, is located in a colder region when the refrigerator 4 is operating/cooling the interior of the chamber and heater 16 is operating to heat microtome).

As to Claim 36, Tabone ('587) discloses that the device (see rejection of claim 34 above and Figures 1-2) wherein said control (8) is designed to reduce a temperature of said refrigerator (4) of the cryostat (1) in a cooling phase (see page 2, lines 19-21 and page 4, lines 3-7 of the English translation which demonstrates control 8 initiating

cooling; where the refrigerator/evaporator is capable of operating to below 0°C after said effective time until at least a majority of disinfectant has deposited on said refrigerator 4), said refrigerator (4) being subsequently thawed (by switching the mode of refrigerator/evaporator 4 –by flowing gas in reverse direction- to provide heat instead) to discharge disinfectant from said cryostat chamber (1) using said collecting device (5, the funnel region at the lowest portion of chamber 1 connected with 18) (disinfectant from 5 will discharge when the collected disinfectant overflows into the chamber 1, 2 to the collection device (the funnel region at the lowest portion of chamber 1 connected with 18) or when 5 possesses a draining hole, and discharges out of the cryostat chamber 1 through 18).

As to Claim 37, Tabone ('587) discloses that the device (see Figures 1-2) wherein said microtome (9) has a heater (16), and said control (7, 8) is designed to heat said microtome (9) after said effective time (see page 3, lines 35-44 of English translation wherein the "new rise in the temperature" is also effected by heater 16, in turn heating microtome 9, as seen in page 3, lines 30-32).

As to Claim 41, Tabone ('587) discloses that the device (see Figures 1-2) wherein said disinfectant introduction means (12-15) comprises a disinfectant supply container (15).

As to Claim 43, Tabone ('587) discloses that the device (see Figures 1-2) wherein said collecting device (5, 18) discharges liquid (see Figures 1-2, which is capable of discharging liquid that is dripping from said refrigerator 4), out of said cryostat chamber (1) via an outlet (see Figure 2, the outlet is the connection of the 1 and 2 to the drain 18).

***Claim Rejections - 35 USC § 103***

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claim 38 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tabone (FR 2705587).

As to Claim 38, Tabone ('587) disclose that the device (see Figures 1-2) wherein said refrigerator (4) also acts as a heater (see last 7 lines of page 2 through 1<sup>st</sup> line of page 3, as well as lines 26-29 of page 3 of English translation of the Description) and said control (8) is designed to switch on said heater (4) which is capable of accelerating thawing, and is deemed that a separate heater in the device configuration of Tabone is unnecessary to achieve thawing.

However, it would have been obvious to one of ordinary skill in this art at the time of invention to provide a separate heater in combination with the refrigerator/heater 4 in the device of Tabone in order to further accelerate thawing.

7. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tabone (FR 2705587) as applied to claim 35 above, and further in view of Krainiak (5711705).

Tabone ('587) is relied upon for disclosure described in the rejection of claim 35 under 35 U.S.C. 102(b).

While Tabone ('587) discloses that the means (12-15) for introducing a vaporous disinfectant (see rejection of claim 1) using a pump (14), Tabone ('587) does not appear to specifically teach that a blower is used for introducing the disinfectant into said cryostat chamber.

It was well known in the art at the time of invention to utilize a blower to distribute vaporized disinfectant. Krainiak ('705) exemplifies a device wherein a blower (31) is used to convey the vaporized disinfectant (36) into a chamber (12) in order to decontaminate surfaces within the enclosure (see Col. 2, lines 33-43 and Col. 5, lines 1-5). It would have been obvious to one of ordinary skill in this art at the time of invention to provide a blower in place of the pump in the device of Tabone in order to deliver vaporized disinfectant as exemplified by Krainiak.

Thus, Claim 39 would have been obvious within the meaning of 35 U.S.C. 103(a) over the combined teachings of Tabone ('587) and Krainiak ('705).

8. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tabone (FR 2705587) as applied to claim 35 above, and further in view of Lin (6589481).

Tabone ('587) is relied upon for disclosure described in the rejection of claim 35 under 35 U.S.C. 102(b).



While Tabone ('587) discloses that a fog of disinfectant is supplied into the cryostat chamber, Tabone ('587) does not appear to specifically teach that ultrasound is used to vaporize the disinfectant as a part of the disinfectant introduction means.

It was well known in the art at the time of invention to vaporizing disinfectant using ultrasound. Lin ('481) exemplifies a device wherein the vaporized disinfectant (16) is produced using ultrasound (48) in a tank (40) containing the disinfectant (16) (see Col. 11, lines 42-58). It would have been obvious to one of ordinary skill in this art at the time of invention to provide an ultrasonic transducer in the device of Tabone in order to generate vaporized disinfectant as exemplified by Lin.

Thus, Claims 39-40 would have been obvious within the meaning of 35 U.S.C. 103(a) over the combined teachings of Tabone ('587) and Lin ('481).

9. Claim 42 is rejected under 35 U.S.C. 103(a) as obvious over Tabone (FR 2705587).

Tabone ('587) is relied upon for disclosure described in the rejection of claim 41 under 35 U.S.C. 102(b).

While Tabone ('587) discloses a tank (15) containing "inhibiting agent" (which is deemed to be a disinfectant as the inhibiting agent is utilized for decontamination) located "advantageously fixed on the side of the cryostat" (page 2, lines 39-40) (see Figure 1), Tabone ('587) does not appear to specifically teach that there is a valve for controlling a disinfectant level.

It was well known in the art at the time of invention to provide a valve in a storage tank for refill/venting purposes. It would have been obvious to one of ordinary skill in this art at the time of invention to provide a valve on the tank of Tabone in order to ensure that there is sufficient amount of disinfectant in the tank by providing capability to refill the tank so that the cryostat chamber will be properly decontaminated.

### ***Response to Arguments***

10. Applicant's arguments filed 11/05/2007 have been fully considered but they are not persuasive.

Specifically, Applicant argues that the reference of Tabone does not disclose that a temperature difference in the chamber is created and that "creation of such a temperature difference requires modification (re-programming) of the controller 8...[and] Tabone provides absolutely no indication that a temperature difference is generated between the microtome and the rest of the chamber".

While Tabone does not specifically teach that the means 16 is used to generate a temperature difference between the microtome 9 and cryostat chamber 1, the apparatus of Tabone disclose all the structural limitations of the claims 34-36. As such, "the manner of operating the device does not differentiate apparatus claim from the prior art" if the prior art apparatus teaches all the structural limitations of the claim. See MPEP § 2114. Thus, since Tabone discloses all structural limitations of the independent claims 34-36 and the heater 16 is capable of heating the microtome while the cryostat chamber is being cooled with evaporator 4 (which will be controlled via the controller 8)

to generate the temperature difference, the reference of Tabone anticipates the claims as rejected above and in the previous office action.

### ***Conclusion***

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Regina Yoo whose telephone number is 571-272-6690. The examiner can normally be reached on Monday-Friday, 10:00 am - 7:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on 571-272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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GLADYS JP CORCORAN  
SUPERVISORY PATENT EXAMINER

RY